



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,728	08/19/2003	Paul S. Hepworth	20030294.ORI	4724

23595 7590 04/28/2005

NIKOLAI & MERSEREAU, P.A.
900 SECOND AVENUE SOUTH
SUITE 820
MINNEAPOLIS, MN 55402

EXAMINER

SHARP, JEFFREY ANDREW

ART UNIT PAPER NUMBER

3677

DATE MAILED: 04/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/648,728	Applicant(s) HEPWORTH, PAUL S.	
	Examiner Jeffrey Sharp	Art Unit 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

- [1] Claims 1-12 are pending.

Drawings

- [2] The drawings are objected to because:

Bore "14" is not shown¹.

Elongate channels "60" are not shown².

Projection "43" is not shown in the embodiment found in Figures 1 and 2³.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement

¹ Specification page 3 lines 12-17.

Art Unit: 3677

Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

[3] Claims 7 and 9-12 are objected to because of the following informalities:

The claims provide insufficient antecedent basis for the limitation "*the rear end*" on line 3.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

[4] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

² Specification page 4 line 23.

³ Specification page 5 line 7.

Art Unit: 3677

[5] Claims 1, 2, and 4-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Bisping et al. DE 3346793 A1.

Bisping et al. teach a fixing plug comprising:

a main body (1) constructed of a rigid but flexible harder plastics material, having a first body portion (top around 3) being a substantially continuously walled sleeve, and second body portion (opposite topside 3) being a solid bar divided by one or more longitudinal slits to form anchorage fingers; and

a friction generating material (2) comprising a flexible elastomer such as polyurethane being disposed within cavities and/or recesses of the main body (1).

The friction generating material (2) is "capable of" frictionally engaging the wall of the bore by way of the longitudinal slits, as polyurethane is by definition: *resilient, deformable, and moldable*⁴. It has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation, but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison, 69 USPQ 138*. In the instant case, the friction generating material (2) would flow radially outwardly and through the longitudinal slits if a screw of greater diameter were accidentally used. See, for example related art US-1,087,299 to Kennedy, which suggests an integral softer friction generating material (11) that flows radially outwardly from a main body (10) of harder material via recesses/cavities (11b) upon insertion of a self threading screw (22). The softer material (11) flows out (13) to positively engage the wall of a bore in a structure (21).

⁴ Applicant's admission, specification page 1 lines 25-26.

Claim Rejections - 35 USC § 103

[6] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[7] Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Bisping et al. DE 3346793 A1 in view of Hofmeister US-5,725,341.

Bisping et al. teach substantially all of the limitations found in claim 2, including a main body made of rigid but flexible thermoplastic material.

However, Bisping et al. fail to disclose expressly *polypropylene* as the material choice for the main body. Note that Bisping et al. suggest *polypropylene* as one of a number of suitable materials for the friction generating materials.

Hofmeister suggests that it is well appreciated and recognized in the art to use any one of a myriad of materials (including high elasticity polymers) for a main body, and that any suitable material would suffice⁵.

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify the main body taught by Bisping et al., so as to be made of any suitable material including polypropylene as suggested by Hofmeister as an obvious matter of art recognized equivalence.

⁵ Hofmeister US-5,725,341 col. 5 lines 8-20.

Art Unit: 3677

Note that it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering design choice. *In re Leshin*, 125 USPQ 416. It is also common knowledge to choose a material that has sufficient strength, durability, flexibility, hardness, etc. for the application and intended use of that material.

Conclusion

[8] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is as follows:

US 20050058522 A1	US-PGPUB	Hughes, Mark Christopher et al.
US 6837018 B1	USPAT	Hagel; Gerald W. et al.
US 6817076 B1	USPAT	Stephenson; Alan
US 6705804 B2	USPAT	Dierker; Sascha
US 6688822 B2	USPAT	Ritter; Frank Georg et al.
US 6416267 B1	USPAT	Nehl; Wolfgang
US 4572708 A	USPAT	Fischer; Artur
US 1087299 A	USPAT	Kennedy
US 6558094 B2	USPAT	Nehl; Wolfgang
US 1138219 A	USPAT	Hottenroth
US 1021794 A	USPAT	Pleister
US 5219452 A	USPAT	Yamamoto; Akio
US 5145301 A	USPAT	Yamamoto; Akio
US 4976571 A	USPAT	Mraz; Dennis Z. et al.
US 4836729 A	USPAT	Bisping; Heinz et al.
US 4712957 A	USPAT	Edwards; Wayne et al.
US 4659268 A	USPAT	Del Mundo; Alfredo R. et al.
US 4554196 A	USPAT	Meeker; Brian L.
US 4370372 A	USPAT	Higgins; William E. et al.
US 4063582 A	USPAT	Fischer; Artur
US 4055051 A	USPAT	Finney; James Lee
US 2092341 A	USPAT	DE VRIES ABRAHAM
US 5669199 A	USPAT	Ludwig; Wolfgang et al.
US 5632839 A	USPAT	Kish; Frederick A. et al.
US 5553436 A	USPAT	Kish; Frederick A. et al.
US 5544980 A	USPAT	Seegmiller; Ben L.

Art Unit: 3677

US 5104266 A	USPAT	Daryoush; Anisi et al.
US 3901039 A	USPAT	Lundkvist; Alfred Ingevald
US 3703790 A	USPAT	Mattes; Heinz Otto et al.
US 3699687 A	USPAT	Bourland; Andre

[9] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Sharp whose telephone number is (571) 272-7074. The examiner can normally be reached 7:00 am - 5:30 pm Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAS


ROBERT J. SANDY
PRIMARY EXAMINER